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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,125	02/26/2002	Jae Deok Park	8733.528.00	5395

30827 7590 10/05/2005

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WASHINGTON, DC 20006

EXAMINER

MENGISTU, AMARE

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/082,125	PARK, JAE DEOK	
	<b>Examiner</b>	<b>Art Unit</b>	
	Amare Mengistu	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 2,7-9 and 11-17 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-6 and 10 is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by **Takeda et al.** (4,799,057).

3. In regard to claim 1, **Takeda** discloses a bi-directional driving circuit of a liquid crystal display (LCD) panel having a plurality of blocks. See column 1, lines 54-59, disclosing, "a driving circuit of the present invention, for a matrix liquid crystal display device...is divided into a plurality of blocks". Note, as depicted in figure 2, that the matrix liquid crystal display has a row and column driver and is thus driven bi-directionally.

Takeda further discloses that each block comprises a second start pulse input terminal for selectively receiving one of the start pulse and an output signal of a next block. See column 4, lines 19-24, disclosing, "Referring to FIG. 1, 41 denotes a sampling circuit which is divided into four blocks 41a~41d. The operation of the blocks are controlled by control signals Ea~Ed respectively. That is, each sampling circuit block is operated when the corresponding control signal is of high level". Inherently, there is an input terminal in each of the four blocks that receives this control signal,

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which is a start pulse. Thus, Takeda discloses that each block comprises a second start pulse input terminal for receiving one of the start pulse and an output signal of a next block. Specifically, each block comprises a second start pulse input terminal for receiving the start pulse.

Takeda further discloses that each block comprises a first start pulse input terminal for receiving one of a start pulse and an output signal of a previous block. See column 5, lines 39-65, disclosing, "FIGS. 6(A) and (B) are another example of the sampling circuit block 41a in the sampling circuit 41 and its driving waveform respectively...a pulse "D" (high level) to be shifted is inputted in the circuit...so that the circuit starts operation. When the pulse is sequentially shifted to the final stage q.sub.m, q.sub.m serves as an input pulse "D" for the next block. On receiving the pulse "D", the next circuit block starts operation...the sampling circuit of the above construction is automatically actuated by the input pulse "D" and automatically interrupted when operation is over". Thus, each block has inherently has a terminal that receives this output signal of a previous block. Thus, Takeda discloses that each block comprises a first start pulse input terminal for receiving one of a start pulse and an output signal of a previous block. Specifically, Takeda discloses that each block comprises a first start pulse input terminal for receiving an output signal of a previous block.

***Allowable Subject Matter***

4. Claims 3-6 and 10 are allowed.

5. The following is an examiner's statement of reasons for allowance: The particular configuration of the first through ninth switching elements, as recited in claim 3, in a bi-directional driving circuit block, was not found in any prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Response to Arguments***

6. Applicant's arguments filed August 25, 2005 have been fully considered but they are not persuasive. In regard to applicant's arguments on page 9, see the above rejection of claim 1 for further clarification.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Mengistu whose telephone number is (571) 272-7674. The examiner can normally be reached on M-F, T-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Amare Mengistu  
Primary Examiner  
Art Unit 2673

AM

10/02/05